

Amendment and Response

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For: BIOLOGICAL SAMPLE PROCESSING METHODS AND COMPOSITIONS THAT INCLUDE
SURFACTANTS

31. **(Amended)** A method of conducting a thermal cycling process, the method comprising:

providing a device comprising at least one process chamber that defines a volume for containing a sample mixture comprising a biological material, an enzyme, a dye, and an effective amount of a surfactant selected from the group of a nonionic surfactant, a zwitterionic surfactant, and a mixture thereof;

delivering electromagnetic energy to the process chamber to raise the temperature of the sample material in the process chamber, wherein the dye converts the electromagnetic energy into thermal energy;

wherein the dye inactivates the enzyme in the absence of the surfactant, and the surfactant inhibits such inactivation.

38. **(Amended)** The method of claim 31 wherein the sample mixture further comprises a triphosphate.

41. **(Amended)** A method of conducting a thermal cycling process comprising:

providing a device comprising at least one process chamber that defines a volume for containing a sample mixture comprising a biological material, a polymerase enzyme, a near-IR dye, an effective amount of a nonionic surfactant, and a triphosphate;

delivering electromagnetic energy to the process chamber to raise the temperature of the sample material in the process chamber, wherein the dye converts the electromagnetic energy into thermal energy;

wherein the dye inactivates the enzyme in the absence of the surfactant, and the surfactant inhibits such inactivation.